



MISSOURI TECHNOLOGY CORPORATION



2010 ANNUAL REPORT

New Leadership

Focused Mission

Outstanding Results



MISSOURI TECHNOLOGY CORPORATION

Missouri Technology Corporation

Harry S Truman Building, Room 680 • P.O. Box 2137 • Jefferson City, MO 65102

Telephone: (573) 526-0470 • Fax: (573) 526-8202

Website: www.missouritechnology.com

Jeremiah W. (Jay) Nixon, Governor

Jason R. Hall, Executive Director

Joseph G. Bannister, Chair



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"We face tremendous opportunities to transform our economy for the 21st Century, and it is vital that we not only bolster our existing high-tech and innovative employers, but also bring more of these cutting-edge companies and their 21st Century jobs to our state."

Jeremiah W. (Jay) Nixon
Governor of Missouri



Message from the MTC Executive Team

2010 – A year of new leadership and outstanding results

November 1, 2010

Governor Nixon, Members of the General Assembly, and Fellow Missourians:

Entrepreneurship and innovation are powerful forces for growing the Missouri economy and creating jobs throughout the State. The Missouri Technology Corporation (MTC) is proud to be the public-private partnership created by the General Assembly to lead this economic development work for our State.

Our principal focus remains on expanding 21st Century bioscience industries in Missouri such as plant science and animal health, which build upon Missouri's rich agricultural history. These growing industries are at the forefront of creating technologies to increase crop yields, improve medical care, produce cleaner fuels, and, of course, create high-paying Missouri jobs.

We are especially proud of our work this year to lead the development of the exciting new Missouri Plant Science Center in Northeast Missouri and our role in launching the Missouri Center for Advanced Power Systems Research in Joplin. And we are equally proud of our work to bring Pioneer Hi-Bred's \$55 million investment in a new plant science facility to New Madrid County and our work to expand Missouri's internationally recognized Animal Health Corridor, which stretches from Columbia to the greater Kansas City and St. Joseph regions. These and other exciting results are outlined in this annual report.

On April 24, 2009, Jason Hall was unanimously confirmed by the MTC Board of Directors to be the new Executive Director. This leadership transition has brought about many positive changes over the past year to fulfill his commitment of leading MTC with the highest level of ethics and accountability to build trusted relationships with stakeholders. This commitment has been put into action through a written statement of our values that guides all of our work, adopting a robust conflicts of interest policy, implementing best-in-class internal controls and oversight, and creating an optimal governance structure for our work. With these reforms, MTC is well positioned to expand its work. We are proud of the fact that the General Assembly has entrusted the new leadership with additional responsibilities this year, including strengthening the innovation center program, launching an entrepreneurial training program targeted at former Pfizer scientists, and helping develop the Missouri Plant Science Center.

While we are proud of what we have accomplished this past year, we know that we cannot rest on past successes or cease trying to improve. We will continue to work hard to use our resources wisely to serve Missouri's entrepreneurs and to be a catalyst for technology-based innovation.

Best regards,

Joseph G. Bannister, Chair

Daniel P. Mehan, Vice-Chair

Dr. James Baker, Secretary/Treasurer

Victoria Gonzalez, Executive Committee Member

Garry Kemp, Executive Committee Member

Jason R. Hall, Executive Director







OVERVIEW OF MISSOURI TECHNOLOGY CORPORATION

The Missouri Technology Corporation is a public-private partnership created by the Missouri General Assembly to promote entrepreneurship and foster the growth of new and emerging high-tech companies. MTC focuses on 21st Century bioscience industries that build on Missouri's rich history in agriculture.



Missouri Technology Corporation

Vision

Our vision is to transform Missouri through the power of entrepreneurship by serving as a catalyst for technology-based innovation to achieve sustainable economic growth.

Mission

Our mission is to provide leadership and make strategic investments that help entrepreneurs create and grow technology-based Missouri businesses. MTC focuses on 21st Century bioscience industries that build on Missouri's rich history in agriculture.

Governance

MTC is governed by a 15-member board of directors, which is appointed by Missouri's Governor, Speaker of the House, and President Pro Tem of the Senate. The President of the University of Missouri System and the Director of the Department of Economic Development are *ex officio* members of the board.

Values

In carrying out our mission, the board and staff are guided by core values.

Integrity – Honesty and candor are the foundation on which MTC builds long-term, trusting relationships with stakeholders.

Transparency – MTC is committed to openness in its operations and active communication with stakeholders.

Accountability – MTC recognizes that it holds a position of public trust and is the steward of public funds. MTC makes informed decisions, takes responsibility for its actions, and tracks the outcomes of its investments.

Independence – The governance, policies, programs, and funding decisions of MTC are nonpartisan and merit-based.

Collaboration – Meaningful partnerships can produce game-changing results for Missouri. MTC is committed to actively collaborating with strategic partners.

Board and Staff



Front Row (l to r): Bill Anderson (Deputy Director), Dan Mehan (Vice-Chair), Jason Hall (Executive Director), Joseph Bannister (Chair), Stacey Hirst (Director of Operations)

Middle Row (l to r): Mike Wetle (Member), Victoria Gonzalez (Member), Dr. Mike Nichols (Member), Garry Kemp (Member), David Kerr (Member)

Back Row (l to r): Dr. Jim Baker (Secretary/Treasurer), Greg Steinhoff (Member), Donn Rubin (Member), Dr. Anthony Harris (Member), Dan Devers (Member), Tom Litz (General Counsel)

Not pictured: Hon. John Griesheimer (Member), Hon. Steve Hobbs (Member), Frank Stokes (Member)

Entrepreneurship and Innovation

A Time-Tested Strategy for Economic Growth

Missouri continues to lead the nation's economic recovery out of one of the greatest downturns in history. To continue to provide this leadership, we must review and fine-tune our economic development policies to accelerate job growth now and to create a bright future filled with opportunity for the next generation of Missouri families.

There are three strategies for achieving economic growth and job creation. First, existing Missouri businesses can *expand* their operations to meet increased demand for their products or services, or through the launch of new product lines. Second, businesses based outside of Missouri can be *recruited* to relocate or expand their operations into Missouri. And, finally, entrepreneurs can take innovative ideas and *create* new Missouri-based businesses. Each of these three strategies serves an important role in creating jobs in Missouri, but history teaches us that entrepreneurship is unique in its ability to create high-growth businesses that are a source of state pride and distinction around the world.

At the turn of the 20th Century, Missouri was a thriving hub of entrepreneurship and innovation that was the envy of the world. Entrepreneurial icons experimented with cutting-edge technologies of that era and in doing so created companies that continue to employ thousands of Missourians still today. Missourians like Charles and Alexander Meston had a vision for creating reliable electric motors at the turn of the 20th Century. That two-person start-up company has grown into Emerson Electric – a technology powerhouse that employs over 120,000 people around the world, with thousands of employees at its world headquarters and manufacturing locations in Missouri. Around the same time, Joseph Leggett and Cornelius Platt were in Southwest Missouri combining their intellectual property and manufacturing expertise to form a start-up company to commercialize an innovative spiral steel coil bedspring. That two-person start-up has grown to become a leading worldwide manufacturer employing 20,000 people and its world headquarters remains right where the original business idea was first conceived in Carthage, Missouri.

Entrepreneurship and innovation are powerful economic forces that are as relevant today as 100 years ago. In fact, start-ups established in the modern era can grow and create jobs even more rapidly. Three of the 10 largest publicly traded companies in the United States today were created in just the past few decades. This reality underscores that supporting entrepreneurship is a critical component of economic growth. And with Missouri consistently ranked among the leading states in the country doing innovative research and our strong Midwestern work ethic, we have a solid foundation on which to build new companies.

Just as trains need tracks to move goods and fields need seeds and water to produce crops, entrepreneurs need support to create and grow new businesses. The support includes not only brick-and-mortar incubators, but also includes hands-on business assistance, access to entrepreneurial mentors, and access to various forms of venture capital that are not available at commercial banks. That is the kind of infrastructure it takes to move an idea from the lab out into the marketplace. The Missouri Technology Corporation is committed to helping entrepreneurs reach their potential and helping build the infrastructure needed for start-up companies to thrive once again in the Show-Me State.

Missourians like Charles and Alexander Meston had a vision for creating reliable electric motors at the turn of the 20th Century. That two-person start-up company has grown into Emerson Electric – a technology powerhouse that employs over 120,000 people.



MTC Investment Strategy



MTC uses a business lifecycle investment strategy to fulfill our mission. From research to production, our investments are focused on promoting entrepreneurship and innovation in Missouri.

Research - It is the fuel that powers entrepreneurship and innovation in Missouri. All across the state, researchers are making discoveries that have the potential to become high-tech companies that create high-paying jobs. MTC supports research as the administrator of the Life Sciences Research Trust Fund and by staffing the Research Alliance of Missouri.

Commercialization - It is the process of creating new Missouri-based companies and high-paying jobs from the research that takes place across the State. MTC facilitates the process of commercialization through strategic investments in talent, capital, and infrastructure.

Cluster Development - MTC makes strategic investments to help grow Missouri's high-tech clusters. This strategy supports communities throughout the state by adding "strength to Missouri muscle." It accelerates our ability to attract private capital to Missouri, create new high-paying jobs, and attract entrepreneurial talent. Drawing on our rich agricultural history, Missouri's most prominent clusters are deeply rooted in the bioscience specialties of animal health and plant science.

Innovative Manufacturing - Technology transforms manufacturing from the products we produce to how we produce products. MTC's investments insure that Missouri grows new businesses to manufacture the products of the future – like medical devices and agriculture-derived products – while also assisting small manufacturers throughout Missouri to cost-effectively produce traditional products that can be exported around the world under the proud label of "Made in Missouri."

Missouri Technology Corporation

Board of Directors

Joseph G. Bannister
Chair

Director David Kerr
Member

Hon. Steve Hobbs
Member

Daniel P. Mehan
Vice-Chair

Gregory P. Steinhoff
Chair, Investment Committee

Hon. John Griesheimer
Member

James Baker, Ph.D.
Secretary/Treasurer
Chair, Audit & Finance Committee

Donn Rubin
Member

Daniel P. Devers
Member

Garry Kemp
Member, Executive Committee

Frank Stokes
Member

Michael F. Nichols, Ph.D.
Member

Victoria Gonzalez
Member, Executive Committee

Anthony Harris, M.D.
Member

Michael Wetle
Member

Research Alliance of Missouri*

Raymond Tait, Ph.D.
St. Louis University
Chair

Rob Duncan, Ph.D.
University of Missouri
Member

Evan Kharasch, M.D., Ph.D.
Washington University
Member

Allen Kunkel
Missouri State University
Vice-Chair

Victoria Steel, Ph.D.
University of Central Missouri
Member

Michael F. Nichols, Ph.D.
University of Missouri System
Member

Nasser Arshadi, Ph.D.
University of Missouri St. Louis
Secretary/Treasurer

Ted R. Knous, Ph.D.
University of Missouri Kansas City
Member

Karla Goldstein
Donald Danforth Plant Science Center
Member

Krishna Krishnamurthy, Ph.D.
Missouri University of Science
and Technology
Member

Jane C. Johnson
A.T. Still University of
Health Sciences
Member

Alan G. Glaros, Ph.D.
Kansas City University of
Biosciences and Medicine
Member

Maria DiStefano, Ph.D.
Truman State University
Member

Frank Veeman, Ed.D.
Northwest Missouri State University
Member

* The Research Alliance of Missouri (RAM) is a non-incorporated roundtable of the chief research officers of the state's colleges, universities, and non-profit research institutions, which is created pursuant to R.S.Mo 348.253.1(1). RAM serves as an advisory group to the MTC board of directors.



MISSOURI TECHNOLOGY CORPORATION

Profit & Loss

October 2009 - September 2010

Balance Sheet

As of September 30, 2010

	Total
Income	
Contributions Income	
Administrative Income	522,308.33
Program Income	0.08
Total Contributions Income	\$522,308.41
Discounts given	72.00
Program Fees	0.00
Total Income	\$522,380.41
Expenses	
Administrative Services/Cost Allocation	2,594.37
Bank Service Charges	36.00
Conference - Expense	510.33
Depreciation Expense	2,632.80
Dues and Subscriptions	560.00
Insurance	9,710.21
Meetings	900.90
Office Supplies	477.11
Payroll Tax	6,502.32
Postage and Delivery	1,933.44
Printing and Reproduction	1,240.36
Professional Services	
Accounting	22,758.48
Consulting	82,750.00(1)
Legal Fees	525,846.41(2)
Total Professional Services	\$631,354.89
Program Expense	826,352.28
Supplies	72.26
Telecommunications	7,670.86
Travel & Ent	35.53
Meals	698.71
Travel	7,573.18
Total Travel & Ent	\$8,307.42
Wages	116,237.04
Total Expenses	\$1,617,092.59
Net Operating Income	-\$1,094,712.18
Other Income	
Total Other Income	\$51,276.53
Net Other Income	\$51,276.53
Net Income	-\$1,043,435.65

	Total
ASSETS	
Current Assets	
Bank Accounts	
Central Bank Checking	9,603,220.78
Total Bank Accounts	\$9,603,220.78
Other Current Assets	
Total Other Current Assets	\$919,632.93
Total Current Assets	\$10,522,853.71
Fixed Assets	
Total Office Equipment	\$589.74
Total Fixed Assets	\$589.74
Other Assets	
Total Other Assets	\$1,587,371.99
TOTAL ASSETS	\$12,110,815.44
LIABILITIES AND EQUITY	
Liabilities	
Current Liabilities	
Accounts Payable	
Accounts Payable	0.00
Total Accounts Payable	\$0.00
Other Current Liabilities	
Central Bank Note	0.00
Contractual Committed Funds	189,651.59
Payroll Liabilities	900.00
Total Other Current Liabilities	\$190,551.59
Total Current Liabilities	\$190,551.59
Total Liabilities	\$190,551.59
Equity	
Opening Bal Equity	0.00
Retained Earnings	12,273,821.46
Net Income	-353,557.61
Total Equity	\$11,920,263.85
TOTAL LIABILITIES AND EQUITY	\$12,110,815.44

Profit and Loss Statement is for the period of October 1, 2009 through September 30, 2010, which crosses two fiscal years; therefore Net Income is reported as portion of Retained Earnings on Balance Sheet.

(1) Includes costs for statutorily mandated peer review for Life Sciences Research Trust Fund grants.

(2) Includes \$291,469.71 for direct planning and development costs of the Missouri Plant Science Center.





RESEARCH



Research is the fuel that powers entrepreneurship and innovation in Missouri. All across the state, researchers are making discoveries that have the potential to become high-tech companies that create high-paying jobs. MTC supports research as the administrator of the Life Sciences Research Trust Fund and by staffing the Research Alliance of Missouri.

1



Missouri is the home to world-class research. This research solves complex problems, but equally as important it is a foundation for economic development. Institutions such as Washington University and the University of Missouri continue to attract hundreds of millions of dollars of investment in competitively funded research to the state. Missouri's proven research strengths in areas such as animal health, plant science, applied engineering, biomedical sciences, and defense and homeland security offer significant opportunities for economic growth and job creation. A few examples are presented below.

Biofuel Research at the Danforth Plant Science Center

The Danforth Plant Science Center is recognized as a world leader in algal research. In January, the National Alliance for Advanced Biofuels and Bioproducts led by the Danforth Plant Science Center received a \$48 million grant from the U.S. Department of Energy for advanced biofuels research related to algae. A major focus of the project is to overcome barriers to sustainable commercialization of algae-based biofuels including jet fuel, diesel, and gasoline for transportation. The project is led by Dr. Jose Olivares and Dr. Richard Sayre is serving as Chief Scientist. The award also triggers a \$20 million industry match and comes on the heels of significant investment in St. Louis by the U.S. Department of Energy last year. The region is playing a leading role in our nation's efforts to create a domestic bio-industry, reduce our dependence on foreign oil, and preserve the environment. This research will initially create 10 to 15 jobs in St. Louis and lays the foundation on which high-tech companies can be built for years to come. The Missouri Life Sciences Research Trust Fund helped pave the way for their success with its early investment in its algal research.

2



"Support from the Missouri Life Sciences Research Board has transformed the CEMT from a vision to reality. This center is rapidly enhancing discovery and technology with regards to treatment and prevention of dental and musculoskeletal disease. It would have been very difficult to establish this extremely successful center without their support."

Dr. Lynda Bonewald
UMKC-Center for Excellence in the
Study of Dental and Mineralized Tissues

Life Sciences Research Trust Fund

The Missouri Life Sciences Research Trust Fund is an important state investment to ensure that Missouri maintains its leadership in the life sciences. The Life Sciences Research Board oversees the Fund, which is administered by the MTC. Funded projects are showing a return to the state.

St. Louis Institute of Nanomedicine

The St. Louis Institute of Nanomedicine (SLIN) is a joint venture of Washington University, St. Louis University, University of Missouri-St. Louis, and St. Louis Community College. SLIN focuses on building a broad regional base of expertise in the use of nanotechnologies in medicine. The Institute also places a strong emphasis on technology transfer and industry partnerships.

UMKC Center for Excellence in the Study of Dental and Mineralized Tissues

The University of Missouri-Kansas City Center for Excellence in the Study of Dental and Mineralized Tissues (CEMT) received seed funding from the Life Sciences Research Trust Fund. CEMT is an interdisciplinary, translational research center composed of researchers from the Schools of Dentistry, Medicine, Nursing, Computing and Engineering to explore dental and musculoskeletal health issues. CEMT aims to discover new treatments, diagnostics, and therapies for dental and musculoskeletal conditions and to bring them to the marketplace. CEMT has already been very successful in attracting additional investment to Missouri.

1. University of Missouri-Kansas City CEMT (l to r): Dr. Lynda Bonewald, University of Missouri System President Gary Forsee, UMKC Chancellor Leo Morton, and Dr. Marco Brotto

2. Donald Danforth Plant Science Center (St. Louis) algae research project



1



Inveno Health

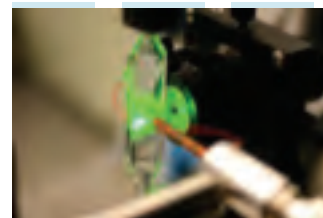
St. John's Medical Research Institute in Springfield has experienced significant growth in personnel and new products in 2010. Initially created to assist in commercializing a single product through a Missouri Life Sciences Research Trust Fund investment, Inveno Health is now actively commercializing 6 medical devices, including the successful market launch of a new hand sanitizer called Hands First. Inveno Health is finalizing development of another 7 medical devices, and is continuing to provide business support to more than 30 projects that are under development at St. John's Medical Research Institute. Hands First is manufactured by Aire-Master Manufacturing in Nixa, Missouri.

This growth in the product pipeline was paired with significant personnel growth. Beginning with two research scientists prior to the Life Sciences Research Trust Fund award, St. John's Medical Research Institute and Inveno Health now employ eight full-time scientists and business development personnel, with an additional three positions to be added by the end of 2010.

"There is no doubt in my mind that Inveno Health and St. John's Medical Research Institute would not be where we are today had we not received the Life Sciences commercialization grant. The initial funding provided the opportunity for us to successfully develop our commercialization model, allowing us to continue developing innovative solutions to important healthcare needs."

Matt Price
Operations Manager
Inveno Health

2



Cancer Research at University of Missouri

Dr. John Viator at the University of Missouri-Columbia has utilized the Life Sciences Research Trust Fund to provide proof-of-concept funding for his technology to detect single cancer cells using a photoacoustic laser system to "listen" for cancer cells circulating in a patient's blood stream. Dr. Viator's technology could be used as an early warning system to help doctors determine if cancer treatments have eliminated cancer in a patient or if cancer has returned to a previously treated patient. The funding from the Life Sciences Research Trust Fund assisted in developing a pre-clinical prototype of the device and allowed the research team to explore using the technology to actually capture the circulating cancer cells. The company Dr. Viator created to commercialize his technology is currently preparing to raise early-stage capital.



3

1. Filling line at Aire-Master Manufacturing in Nixa, Missouri. Aire-Master is Inveno Health's contract manufacturer for producing Hands First.

2. A sample is passed through a very narrow passage in Dr. Viator's device and illuminated by a laser beam to detect the targeted cells

3. Dr. John Viator working in his laboratory at the University of Missouri with a photoacoustic laser to detect cancer cells



TALENT

CAPITAL

INFRASTRUCTURE



COMMERCIALIZATION



Commercialization is the process of creating new Missouri-based companies and high-paying jobs from the research that takes place across the State. MTC facilitates the process of commercialization through strategic investments in talent, capital, and infrastructure.



Talent Capital Infrastructure

Commercialization of research discoveries requires a mix of talent, capital, and infrastructure. Successful commercialization requires both the innovators who discover exciting new technologies in their labs or garages and the entrepreneurs who can take those ideas and convert them into successful businesses that create good jobs for Missourians.

MTC recognizes the importance of entrepreneurial talent in the innovation equation and has participated in several initiatives to grow, nurture, and retain this talent in Missouri.

IT Entrepreneur Network

The IT Entrepreneur Network (ITEN) is an initiative in St. Louis to bring together the region's entrepreneurs in information technology to create a robust entrepreneurial community that generates successful IT business ventures.

ITEN was formed by the St. Louis IT Coalition, University of Missouri-St. Louis, and Innovate St. Louis with seed funding from the MTC. ITEN links IT entrepreneurs to resources and services to expedite their path to success through mentoring, networking, and mock angel investment training. ITEN has also begun an executive search service for member companies to link serial entrepreneurial talent with promising new companies. ITEN has mentored over 140 new businesses since it was established in 2008, including 44 in 2010.

"Thanks to an investment from the Missouri Technology Corporation, ITEN was launched with a mission to support technology entrepreneurship in the St. Louis and eastern Missouri region. We currently have over 140 start up companies in the Network along with 90 volunteer mentors, two dozen early-stage investors and many other interested groups and individuals. The Network continues to grow every day. Many of our companies have received outside investor funding, have attained significant revenue and development targets, and have hired employees into their growing enterprises. ITEN is proud of what we have been able to accomplish in a little over 2 years, none of which would have been possible without the generous support of the MTC."

Jim Brasunas
Director
ITEN

1

1. Mock Angel training at the IT Entrepreneur Network





1

MU Biodesign and Innovation Program

The MU Biodesign and Innovation Program (MUBIP) is one of very few like it in the nation. MTC is a founding funder of this new initiative and continued its investment in 2010. MUBIP has already produced outstanding results for a new program. Fellows completing the program receive immersion experience in the clinical, engineering and business aspects of developing new medical device technologies. The program has become a significant producer of new intellectual property on the University of Missouri-Columbia campus and has already produced spin-out companies. One of these companies, Adroit Motion, recently won over \$20,000 at the Rice University Business Plan competition, one of the most prestigious in the nation, for its new laparoscopic surgical device.

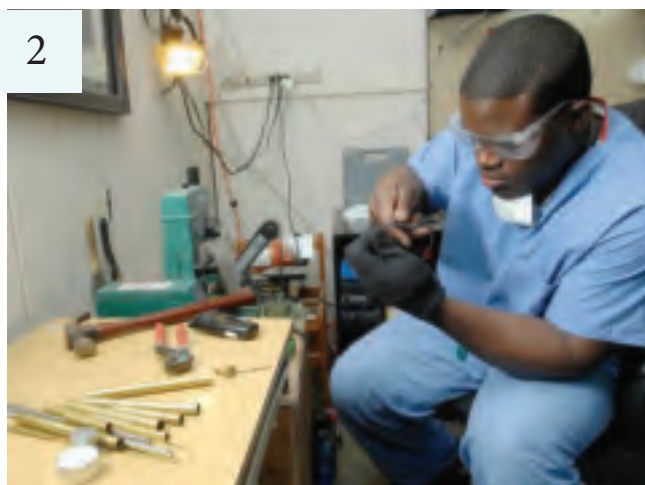
“The Biodesign and Innovation Program is THE premier, cross discipline, most prolific IP generating program year-after-year at the University of Missouri. The IP generated in this program will not only ultimately result in revenues coming to the University in licensing fees, it will also help medical patients worldwide. MTC’s participation in the University of Missouri’s Biodesign and Innovation Program has not just been financial. A representative from MTC is an active member of the Board of Directors. The financial contribution has not just been pivotal to the creation and sustainment of the program, it has been enabling. Without the support of MTC, this program would probably not exist.”

Gregg Scheller
Co-Director
MUBIP

“The MU Biodesign and Innovation Program has provided me with a hands-on education of the process of taking a new medical device from idea to market. For an engineer, the opportunity to be clinically immersed is one that can be found nowhere else but in this type of fellowship. As an engineer I have realized that the process of applying new technologies to medical devices is more than just product design. It is a three-fold process integrating clinical understanding and business development within the design. The commercialization phase of the fellowship has provided me the opportunity to learn from many clinical and entrepreneurial experts in medical device industry. The mentoring by these experts in conjunction with firsthand experience through the MUBIP has left a significant positive impact on me as an entrepreneur in my career goal of becoming a biomedical innovator.”

Rebecca Rone
Senior Fellow
MUBIP

2



1. MU Biodesign and Innovation Fellows at Rice University Business Plan competition

2. Dr. Anthony Harris building a medical device prototype in the MU Biodesign lab

COLUMBIA DAILY TRIBUNE/DON SHRUBSHELL

From Recession to Renewal *Retaining Bioscience Talent in Missouri, Building New Companies*

Building the talent necessary to achieve Missouri's vision of a 21st Century innovation economy is a long-term strategy. This talent is cultivated over many years and is difficult to replace. Over the past 18 months, the tectonic plates of the pharmaceutical industry have been shifting to adapt to the current market environment. Mergers and acquisitions have set off a chain reaction of workforce reductions and reallocations. These changes were especially acute in the St. Louis region. In the wake of these changes, the St. Louis region faced the potential of losing large numbers of highly skilled bioscience workers.

MTC has been actively engaged with state and local partners and industry to keep as many of these highly talented bioscience workers in Missouri as possible. The goal of these efforts is to retain these workers to either start or work for new entrepreneurial ventures that are creating new companies from innovative technologies. These collaborative initiatives provide opportunities for dislocated bioscience workers to remain in St. Louis and accelerate Missouri's growth as a leader in biosciences. MTC is directly involved in three of these initiatives.

1

1. Former Pfizer scientist, Dr. John Walker in new MCG lab
2. John McDonnell, Donn Rubin, and Dennis Lower speaking at the BioGenerator ribbon-cutting ceremony
3. Center for Emerging Technologies located in St. Louis

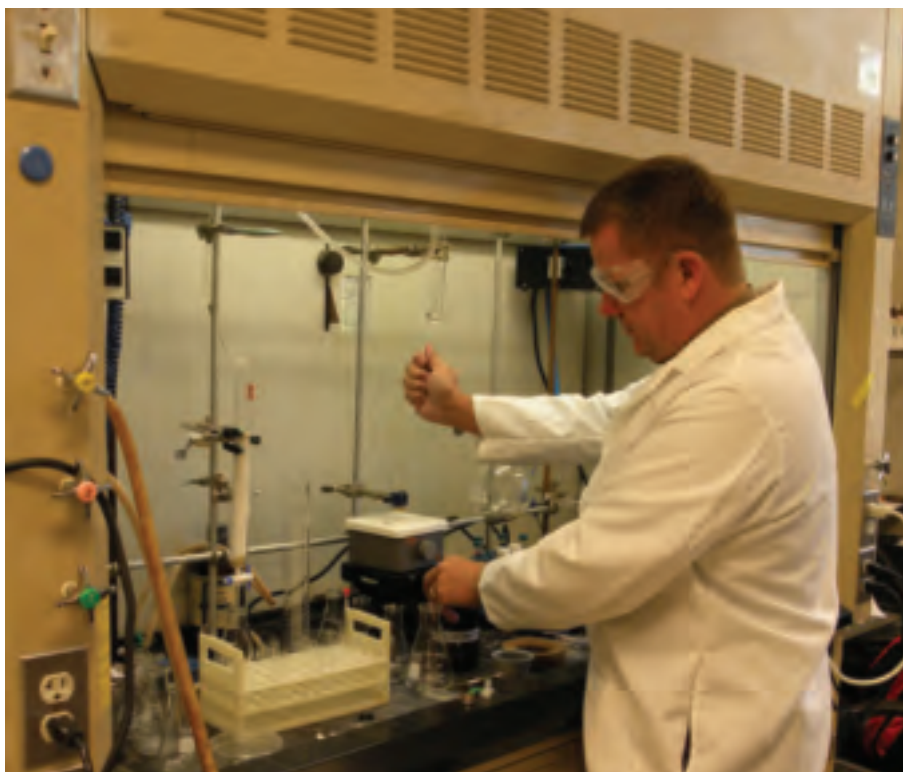
"The new chemistry lab space being built at UMSL creates a modern facility where medicinal chemistry research can be carried out. This lab helps fill a critical need for this type of facility in the St. Louis area. It has created an opportunity for not only myself but other former Pfizer colleagues to stay in Missouri to continue to do this kind of important research as well as future opportunities for other scientists as well."

Dr. John K. Walker

Director of the Medicinal Chemistry Group
University of Missouri-St. Louis

UMSL Medicinal Chemistry Group

The MTC provided funding to the University of Missouri-St. Louis to develop laboratory space for its newly created Medicinal Chemistry Group (MCG). The MCG, led by former scientists at the Pfizer Chesterfield campus, will work to translate basic research into clinical applications to generate new treatments for diseases. The focus of their work is orphan illnesses that have no current cures and illnesses impacting less-developed countries. MCG will also be a strong collaborator with the St. Louis University Center for World Health, another initiative to retain highly skilled bioscience workers. This laboratory space will be located at UMSL's IT Enterprises biotechnology incubator and high-powered computing center in St. Louis County.





2

BioGenerator Accelerator Labs

The BioGenerator Accelerator Labs at the Center of Research, Technology and Entrepreneurial Exchange (CORTEX) was partially funded through a Life Sciences Research Trust Fund award. This effort provides researchers and entrepreneurs access to critical lab space and equipment to translate their ideas from bench to market at a low cost. This space will be especially important to dislocated bioscience workers who are working on new ventures. The facility is located adjacent to a partnership between Washington University School of Medicine and the Pfizer Drug Indications Unit, which is looking for new treatments from the library of molecules developed at Pfizer's Chesterfield campus. The first tenant in the new lab will be Confluence Life Sciences, an early-stage company founded by a team of former Pfizer scientists.



"Without a resource like the BioGenerator Accelerator Labs, we would have been forced to leave St. Louis. The Labs are a great asset for the region, and an essential asset for Confluence."

Joe Monahan, Ph.D.
Confluence Life Sciences

Confluence Life Sciences is an early-stage company, founded by former Pfizer scientists, developing new treatments for autoimmune and inflammatory diseases and cancer.

3



Bioscience Entrepreneurship Training Program

The Bioscience Entrepreneurship Training Program is designed to provide entrepreneurship training to highly skilled bioscience workers that have been directly impacted by the workforce reductions in the St. Louis region. The goal is to provide scientists with the training to transition from a large corporation to become an entrepreneur and leader of bioscience start-up companies. Through this strategy, the MTC seeks to retain highly skilled workers in the St. Louis region that may otherwise seek opportunities outside of Missouri. In 2010, MTC made an award to implement this program to a partnership led by the Center for Emerging Technologies, BioGenerator, Innovate Venture Mentoring Service, and the University of Missouri Extension's MOFAST team.



Talent Capital Infrastructure

To launch start-ups and commercialize technologies, entrepreneurs need access to early-stage capital. This is not the kind of capital available at commercial banks. Rather, it comes from seed funds, angel investors, and venture capital funds. Without adequate capital, promising new companies struggle to escape the "Valley of Death." MTC makes strategic investments to accelerate private investment and helps build the infrastructure that fuels the growth of start-up companies.

MOTIP and MOFAST

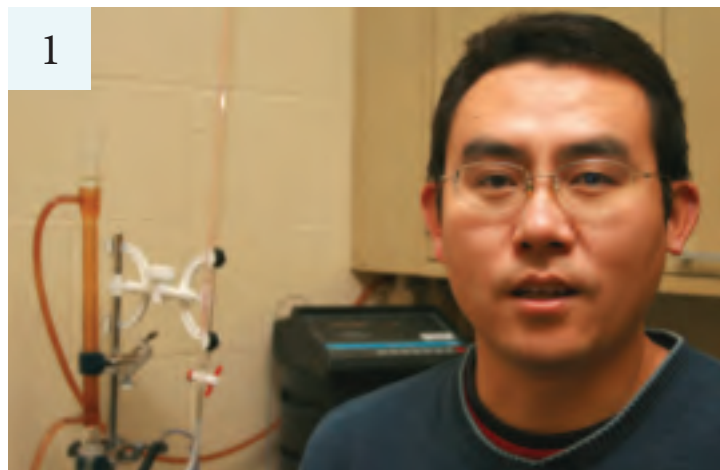
Two of the largest sources of seed funding that provides early-stage capital to certain types of high-tech start-ups are the federal Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) programs. Launched in 1983 under President Ronald Reagan, the SBIR/STTR programs are designed to stimulate the growth of start-up technology businesses to keep the United States at the cutting edge of innovation. Federal agencies such as the U.S. Department of Defense and the National Institutes of Health set aside a portion of their annual research and development budgets to award competitive seed capital to private start-up businesses that demonstrate strong potential for commercializing new products.

Prior to the launch of the MTC's Missouri Technology Incentive program (MOTIP) and Missouri Federal and State Technology program (MOFAST), Missourians were largely not accessing the SBIR/STTR seed capital funds. In FY2007, the year prior to state support for MOFAST, University of Missouri Extension reported that Missourians generated roughly \$10.1 million in SBIR/STTR proposals and secured \$3 million in awards. In FY2008 and FY2009, with state support and the launch of MTC's innovative MOTIP initiative, Missourians have generated over \$100 million in proposals and secured nearly \$20 million in awards. Missouri Technology Company of the Year for 2010, InnovaPrep, a biodefense start-up based in Drexel, Missouri, worked with MTC and the MOFAST team to win an SBIR award to fuel its growth and development.

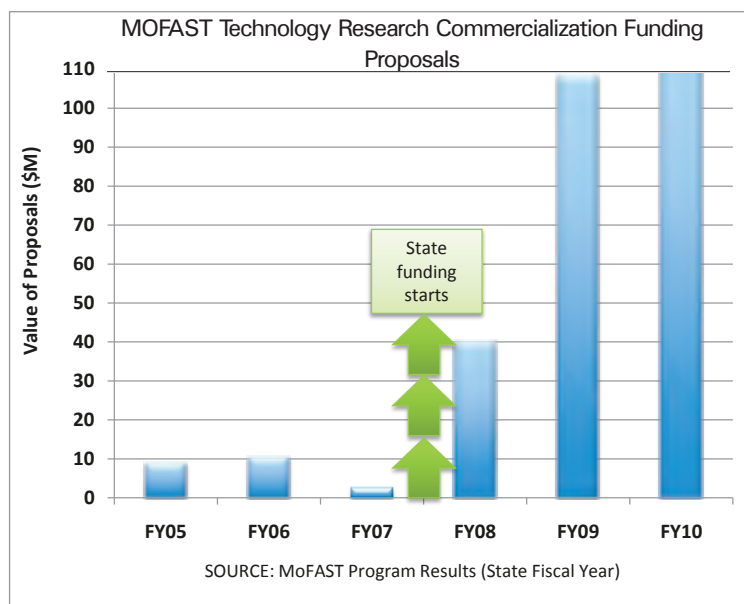
Dr. Hao Li owns a medical device company created to design and sell materials and devices for orthopedic, dental, cardiovascular, and surgical applications. Dr. Li's company, Nanova, Inc., is a MOFAST client and has worked extensively with the team to capitalize on his expertise in nanotechnology, engineering, and understanding of patient and physician needs. Nanova expects to launch its first device later in 2010, with additional launches expected in the following year into markets that could generate more than \$20 million in sales in a short period of time.

That kind of product development is expensive. The MOFAST staff have been successful in helping Nanova secure more than \$2.2 million in Small Business Innovation Research awards from the National Institutes of Health to conduct further research and development. Nanova has benefited from MTC's MOTIP Phase 0 program. Dr. Li's success is typical of the kind of high-technology economic development that occurs in multiple locations on the MU campus. It brings investment into Missouri and lays the foundation for new high-growth companies.

1

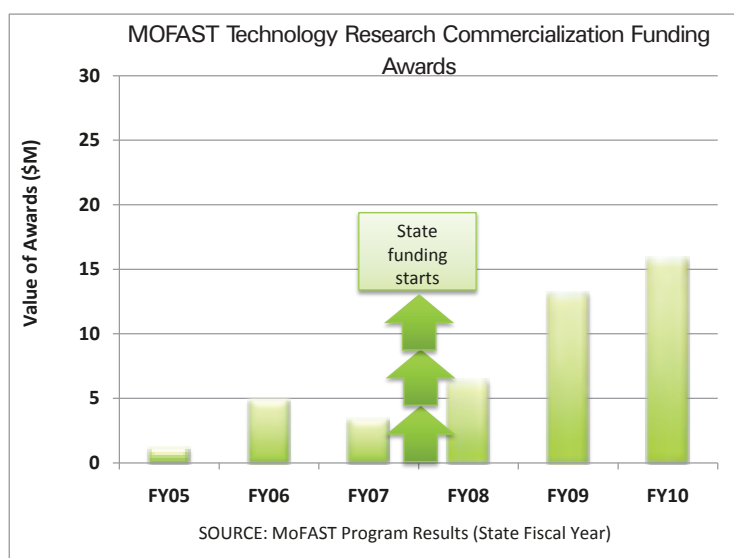


1. Dr. Hao Li, CEO of Nanova, Inc.



Angel Investors

Over the past year, MTC continued to fund the creation of a robust network of angel investor groups across the state. With these awards, existing angel investment networks such as Centennial Investors in Columbia have been able to increase their capacity to evaluate new investments. Along with Columbia, awards have been made to angel networks in Springfield and the Kansas City area. Newly established groups have been able to recruit members and establish processes for evaluating new investments. Angel investment groups have also been able to provide significant training to their members. Building this capacity in Missouri's communities will provide more opportunities for entrepreneurs to find the funding they need to grow their businesses in Missouri. The angel groups assisted by MTC work closely with local chambers, economic development organizations, and innovation centers. The early success of these groups has led Joplin, Rolla, and St. Joseph to explore the formation of angel investor groups in their communities in the year ahead.



"Funding from MTC helped us improve the sophistication of our investment process and has led to increased membership and higher seed capital investment in technology ventures."

Andrew Beverley
President
Centennial Investors
Angel Investor Network in Columbia

1



InnovaPrep, Inc.

A science and engineering team led by entrepreneurs Dave Alburty and Andrew Page developed a contaminant detection technology for the U.S. Department of Defense to help protect the United States from the threat of bio-terrorism. That core technology gave rise to their start-up business, InnovaPrep, Inc., based in Drexel, Missouri. The InnovaPrep devices fill a need for an automated system to concentrate and prepare liquid samples for analysis. The company's core technology is in demand in other industries such as medical diagnostics, pharmaceutical production, and food and beverage quality control, which is helping this young company grow. In roughly two years, this two-person start-up now employs 12 Missourians at its headquarters in downtown Drexel.

MTC's MOTIP and MOFAST programs helped InnovaPrep get started. MOFAST counselors helped the research and development duo learn how to prepare a competitive application for the federal SBIR program. MTC also provided a low-interest loan to help the company protect its intellectual property so that the company could focus on expanding and creating more jobs.

In 2010, InnovaPrep won the Governor's Technology Company of the Year award and was honored at the Governor's Conference on Economic Development in Kansas City.

2



"The first thing anyone who wants to start a high-tech business in Missouri should do is talk to MOFAST. The assistance of MOFAST and the MTC's MOTIP Phase 0 program have been extremely important to our company's growth and development."

Dave Alburty
CEO
InnovaPrep, Inc.

3



1. Andrew Page working in his laboratory in Drexel, Missouri
2. InnovaPrep CEO Dave Alburty and President and CTO Andrew Page
3. InnovaPrep receiving the 2010 Governor's Technology Company of the Year award from Governor Jay Nixon



1. Newsy.com staff and MU Journalism students work on an upcoming news story
2. Newsy.com's state-of-the-art digital newsroom provides their staff and MU Journalism students with access to multiple news outlets used to prepare their multi-perspective video news content
3. The scientific team of Pulse Therapeutics, Inc. working in their laboratory



Newsy.com

Newsy.com is an early example of the MTC's efforts to provide early-stage capital to high-tech start-up companies. In 2008, MTC provided low-interest debt financing to attract a Kansas City native and the founder of Newsy.com back to Missouri from San Francisco, California. This funding allowed Newsy to quickly establish their newsroom and studio in Columbia across the street from the MU School of Journalism. Newsy achieved numerous early successes, including developing highly rated news apps (applications) for mobile devices including the iPhone, iPad and Android platforms. The company's strong, collaborative relationship with the Journalism School has allowed it to become the high-quality, low-cost leader for multi-perspective video news content. With MTC's assistance in 2010, Newsy completed a \$2 million Series A capital raise and continued to hire new employees.

"MTC was instrumental in attracting Newsy to Missouri and helping us get our digital newsroom up and running quickly. MTC's support allowed Newsy to innovate and has jump started our leadership position in mobile news apps. The decision to base our company in Missouri has proven to be a great choice - MTC's influence and support has been remarkable."

Jim Spencer
President and Founder
Newsy.com

"Assistance from MTC has been critical to our company's survival, especially considering the recent economic downturn. With MTC's support, it is much more likely that greatly needed technologies will grow and thrive in Missouri. Our company is now confident that we will continue to create jobs in the region and that we will play a significant role in helping to strengthen biotechnology in St. Louis."

Francis M. Creighton, Ph.D.
President and Chief Technology Officer
Pulse Therapeutics, Inc.

Pulse Therapeutics, Inc.

MTC partnered with the BioGenerator in St. Louis to provide critical early-stage funding to Pulse Therapeutics, Inc. in 2010. Headquartered at the Center for Emerging Technologies, Pulse is developing a treatment for patients suffering from stroke and deep vein thrombosis that improves the effectiveness of clot-busting drugs through the use of electro-magnetic particles. This new treatment could potentially improve treatment, expand the number of patients who can be treated, significantly improve health outcomes, and reduce long-term health care costs. Pulse is led by a team of serial entrepreneurs who were key members of the leadership of Stereotaxis. MTC seized the opportunity to retain these highly successful entrepreneurs in Missouri through its investment, which was significantly leveraged by private capital.





Talent Capital Infrastructure

Infrastructure is more than just the bricks and mortar of incubators. The entrepreneurial infrastructure of Missouri does consist of incubators and other facilities geared towards the commercialization of new technology. But just as important is the infrastructure of programs to support Missouri entrepreneurs. MTC is responsible for the administration of the state's innovation center program. MTC is also a joint owner of the University of Missouri Technology Park at Fort Leonard Wood and the Missouri Plant Science Center, which is currently under construction in Mexico, Missouri.

"The Center for Emerging Technologies continues to add value to our venture by making connections to the key people that have the means and interest to helping our venture. The connections at CET run deep within the entrepreneurial eco-system. These connections include investors, candidate board of directors and other ventures that we may be able to collaborate. One connection resulted in \$100,000 in one week. Real results, real connections, value added."

Seth Burgett
President and CEO
Yurbuds

In 2009, Yurbuds was ranked #9 on Forbes Magazine's list of America's Most Promising Companies.

Innovation Centers

Missouri's innovation centers are located in 10 communities across the state: Cape Girardeau, Columbia, Joplin, Kansas City, Kirksville, Rolla, St. Louis, St. Joseph, Springfield, and Warrensburg. Innovation centers facilitate the growth of technology companies by assisting entrepreneurs in obtaining talent and capital. Many of Missouri's innovation centers also assist companies with the facilities they need to move their technology from a laboratory into the marketplace.

Institute for Industrial and Applied Life Sciences

The newest innovation center is in St. Joseph. It is operated by the Institute for Industrial and Applied Life Sciences (IIALS), a private-public partnership that provides workforce development, economic development, and a focus on the regional animal health and nutrition industry. The state efforts, especially those provided by MTC, have provided the IIALS with tools to continue to serve the northwest region of Missouri.



1. Seth Burgett, CEO and President and Rich Daniels, COO of Yurbuds, an early-stage company located at CET



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"Had it not been for JVIC, it would have been very challenging for a start-up company located in Springfield to survive in a high tech/scientific environment. The shared capital equipment, services, and human resources have been invaluable to sustaining our business."

Ryan Zweerink
Executive Vice President
U.S. Photonics in Missouri Economy Today

The innovation center status and funding has allowed the IIALS to help both local and start-up companies, such as Boehringer Ingelheim Vetmedica, Inc. (BIVI) and DT Search and Designs (DTS), become more successful. By utilizing innovation center resources, DTS has continued to grow, and BIVI was able to keep 36 jobs in St. Joseph, due to the available space at the Christopher S. (Kit) Bond Science and Technology Incubator. IIALS has supported and sponsored a growing relationship between Missouri Western State University and BIVI, which provides a benefit to students, staff, and future employees of BIVI.

University of Missouri Technology Park at Fort Leonard Wood

Established in 1999, the University of Missouri Technology Park at Fort Leonard Wood located at Missouri's largest military installation, is a highly successful partnership between MTC and the University of Missouri System. MTC holds a 45 percent ownership interest in the venture and the University owns the remainder.

With two buildings at full capacity and having validated the demand for space, the University and MTC are actively working to market the technology park for further development and make full use of the unique enhanced-use lease, the only private technology park located on an active military installation in the United States.



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3

1. U.S. Photonics Team at the Jordan Valley Innovation Center (Springfield)

2. Lab located at the Jordan Valley Innovation Center (Springfield)

3. Aerial view of buildings at the University of Missouri Technology Park at Fort Leonard Wood

Missouri Plant Science Center

The Missouri Plant Science Center is an exciting new facility that combines cutting-edge plant science research and manufacturing capabilities. The nearly 25,000 square foot facility will be located in Mexico, Missouri and will house traditional offices, wet and dry laboratories, and manufacturing equipment that will process soybeans and other plant-based material into value-added products. The community of Mexico seeks to leverage its rich agricultural heritage and skilled workforce to diversify its traditional economic base with research-driven, high-growth plant science companies. This new center is the first phase of that local vision.

The overall goal of the Missouri Plant Science Center is to strategically capitalize on Missouri's leading position in plant science to create high-paying, high-tech jobs and to serve as a catalyst for capital investment in Northeast Missouri. Before any dirt was even turned on the job site, the Missouri Plant

"By drawing on our deep agricultural roots, Missouri has established itself as a world leader in plant science, which will enable us to develop more productive crops, more nutritious foods, cleaner and safer fuels and better medicines. The new Missouri Plant Science Center will continue that tradition and bolster our state's standing in this high-tech, high-growth industry of the 21st Century, while creating the quality, high-paying jobs that will go with it."

Jeremiah W. (Jay) Nixon
Governor of Missouri

Science Center secured its first tenant, Soy Labs LLC, which will relocate to Mexico, Missouri from Fairfield, California. Soy Labs is an emerging, research-driven company that produces soy-based ingredients principally for the food and health industries. At the Mexico, Missouri site, Soy Labs will initially focus on production of products known as Lunasin XP® and LunaSoy™ that seek to deliver heart health benefits of the Lunasin soy peptide in consumer products.

Show-Me Commitment

Joseph Bannister, an expert in real estate and construction, has volunteered approximately 1,000 hours to the Missouri Plant Science Center project.



"We are still early in the bioscience revolution, but today we celebrate an important step the community of Mexico is taking to insure that it is included in that economy of the future and in doing so paving the way for high-paying, high-tech jobs. Congratulations, City of Mexico."

Joseph G. Bannister
Chair

Missouri Technology Corporation and Missouri Plant Science Center



2

The plant science center facility is owned and managed by Missouri Plant Science Center LLC. This LLC is a joint venture of the City of Mexico, University of Missouri System, and Missouri Technology Corporation. These three partners provided the funding to build the Missouri Plant Science Center facility. The University of Missouri and Missouri Technology Corporation have a history of successful collaboration, including the highly successful University of Missouri Technology Park at Fort Leonard Wood, and are excited to partner with the community of Mexico, Missouri in this new venture.



3



4

1. Missouri Plant Science Center groundbreaking held on April 26, 2010 (Mexico, Missouri)

2. Artist's rendering of the completed facility

3. First tilt-up panel being erected at the Missouri Plant Science Center site

4. Workers at the Missouri Plant Science Center site

"Some of the millions of jobs lost in the last two years won't be coming back, that is where bio-tech shows promise in replacing those jobs and bio-tech will provide jobs of the future, whether in the research lab, the incubator, the small company or the large corporation, bio-tech has the ability to create the high paying jobs we all want to see."

U.S. Senator Christopher S. "Kit" Bond



INDUSTRIAL
EXPANSION

WORKFORCE
COMPETITIVENESS

PARTNERSHIPS



CLUSTER DEVELOPMENT



To promote our vision of making Missouri a world leader in technology, MTC makes strategic investments to help grow Missouri's high-tech clusters. This strategy supports communities throughout the state by adding "strength to Missouri muscle." It accelerates our ability to attract private capital to Missouri, create new high-paying jobs, and attract entrepreneurial talent. Drawing on our rich agricultural history, Missouri's most prominent clusters are deeply rooted in the bioscience specialties of animal health and plant science.

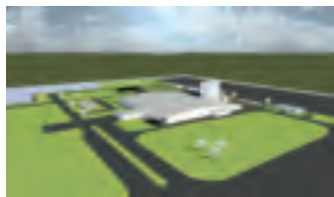
Industrial Expansion Workforce Competitiveness Partnerships

Industrial expansion is a key component of MTC's strategy to grow Missouri's high-tech clusters. Through the attraction of high-tech companies from outside Missouri and the expansion of companies located here, Missouri's high-tech industry clusters develop more quickly. MTC makes strategic investments to attract and expand companies that bolster Missouri's bioscience clusters through job creation and private capital investment.

Pioneer Hi-Bred, Inc.

In early 2010, MTC made an award that effectively brought an intense four-state competition to an end, and put Missouri's incentive package on top to win a \$55 million industrial expansion from one of the best-known names in plant science and agriculture: Pioneer Hi-Bred, Inc. Several months later in May 2010, Pioneer broke ground on this state-of-the-art

advanced soybean production facility on a 129-acre tract of land in New Madrid County. Not only does this project reinforce Missouri's reputation as the premier business location for advanced plant science, it brings significant capital investment to Southeast Missouri that positions it for further growth in this high-tech industry. The construction underway is already putting countless Missourians to work, and the new facility will create 50 new high-paying jobs when it is operational in the fall of 2011. In addition to the new hires, Pioneer will also contract with area farmers and pay grower premiums to help produce the advanced soybeans that will be conditioned at the new facility.



"This location strengthens our ability to bring new products to the market faster and to help farmers increase their productivity and profit. Our high-yielding Y Series soybeans have created even more demand for Pioneer soybeans, and this new facility will help ensure that growing demand is met."

Paul E. Schickler
President
Pioneer Hi-Bred, Inc.



4



"Missouri is already home to many firms that are worldwide leaders in life sciences and plant science, and the construction of a new Pioneer Hi-Bred production facility only enhances our state's reputation as a hub for cutting-edge commerce and research. The expansion in Missouri of companies like Pioneer Hi-Bred will provide good-paying jobs for our highly skilled workforce, and bring precisely the kind of next-generation growth that will help Missouri lead the country's economic recovery."

Jeremian W. (Jay) Nixon
Governor of Missouri

1. Hard hats and shovels used during Pioneer groundbreaking held May 17, 2010 in New Madrid, Missouri
2. Artist rendering of new facility
3. Governor Jay Nixon and Congresswoman Jo Ann Emerson attend Pioneer groundbreaking
4. (L to R) Commissioner Clyde Hawes, Paul E. Schickler (President, Pioneer Hi-Bred, Inc.), Governor Jay Nixon, Congresswoman Jo Ann Emerson, Alejandro Munoz (Vice President and Regional Director, North America, Pioneer Hi-Bred, Inc.), officially break ground for Pioneer's first plant science production facility in Missouri

2



Leinco Technologies, Inc.

MTC led a partnership of the Missouri Department of Economic Development, St. Louis County Economic Council, and the City of Fenton to develop an incentive package to keep Leinco Technologies in Missouri. Leinco publicly announced its intention to relocate to Florida and build a state-of-the-art bioscience manufacturing facility. The collaboration by state and local partners will keep 20 existing jobs in Missouri and results in Leinco creating 48 new jobs. Furthermore, Leinco will make a capital investment of over \$3 million in Missouri. Leinco Technologies will expand from a 10,000-square-foot research and manufacturing facility in unincorporated St. Louis County into a 27,000-square-foot underutilized building in Fenton that was once part of the Chrysler supplier complex. Leinco Technologies, established in 1992 by Pat Leinert, is a provider of custom research services and specialty bioscience manufacturing, including early research products and proteins. Leinco's products and services are used by bioscience researchers worldwide.

"The Missouri Technology Corporation is the type of organization that Missouri needs to be flexible and responsive in today's competitive economy. It is vital to the St. Louis region to have a partner like MTC encouraging the growth of the plant and life science industry in our community, and the Missouri Technology Corporation is an outstanding partner to St. Louis County and our client companies."

Denny Coleman
President & CEO
St. Louis County Economic Council



1

1. Bioscience worker at Leinco Technologies works in the R&D laboratory to explore new applications for the advanced proteins they manufacture
2. Denny Coleman, President & CEO of the St. Louis County Economic Development Council
3. Pat Leinert, President of Leinco Technologies receives Entrepreneur of the Year award from St. Louis County

3



"Governor Jay Nixon's team at MTC and DED, and County Executive Charlie Dooley's team at SLCEC worked together in a highly professional manner to make it possible for Leinco Technologies to remain in St. Louis County. Everyone in these three government organizations worked diligently and helped make easier our decision to invest a substantial amount of private capital to build our new state-of-the-art bioscience R&D and manufacturing center in Fenton, which is slated to open before the end of the year."

Pat Leinert
President and CEO
Leinco Technologies, Inc.



1. MU Incubator at
Monsanto Place
(Columbia)

2. Dr. Kevin Slater, CEO
of PetScreen, Ltd. and
Graeme Radcliffe, Chair
of PetScreen, Ltd.

PetScreen, Inc.

PetScreen, Ltd., an innovative animal health company located in the United Kingdom that created a biomarker test for the early detection of lymphoma in canines, had a history of collaboration with the University of Missouri School of Veterinary Medicine. The MTC led a partnership of the University of Missouri and the Columbia Regional Economic Development, Inc. (REDI) to leverage that research relationship and make Columbia, Missouri the new home of PetScreen, Ltd.'s start-up U.S. operations. The U.S. operations – PetScreen, Inc. – are located in the MU Life Science Incubator at Monsanto Place. In November 2009, MTC provided a low-interest equipment loan that allowed the company to recreate a U.S.-based laboratory similar to the one it operates in the United Kingdom. This investment strengthens the internationally recognized Animal Health Corridor, which stretches from Columbia, Missouri to the greater Kansas City and St. Joseph regions, and reinforces that Missouri is *the place* to locate an animal health business in the United States.



1

"The financial assistance offered by both REDI and MTC were pivotal in helping us fast track the establishment of our new facility at Monsanto Place. In addition, the contacts and networks so generously provided by everyone at REDI, MTC and Monsanto Place were invaluable in helping us to understand the details of business life in the United States. Without all this help, we would certainly not be as advanced and ready to grow our business as we now are. A number of research projects with the MU College of Veterinary Medicine, the Veterinary Medicine Diagnostic Laboratory and the Charles W. Gehrke Proteomics Center are actively helping to expedite the progress of our commercial and scientific objectives. Additionally, the links within the Animal Health Corridor are proving to be extremely helpful to PetScreen on a variety of levels."

Dr. Kevin Slater
CEO
PetScreen, Ltd.

2



"The Science Street Fair was an interactive experience for all ages. The event raised awareness in the importance of STEM and Outreach in the Community. We felt that we walked away making a difference in the lives of others. We will be participating in this event for years to come!"

Tina Balse

Recruitment Coordinator

University of Missouri-Columbia College of Engineering

Industrial Expansion Workforce Competitiveness Partnerships

Workforce competitiveness is a critical factor to any successful business in today's global economy. This is especially true for businesses in Missouri's high-tech industry clusters. Having a highly skilled, educated workforce provides an important asset to attract, create, and grow businesses in Missouri's clusters. An investment in training and education provides future returns to the economy through increases in worker productivity. MTC makes strategic investments to insure that Missouri workers are ready for the jobs of the 21st Century.



1

Training the Workforce of the Future

MTC partnered with Science and Citizens Organized for Purpose and Education (SCOPE) and the Missouri Biotechnology Association (MOBIO) to reach out to children, parents, and teachers to help them identify pathways for pursuing educational and career opportunities in math, science, engineering, and technology.

In 2010, this partnership led to the launch of Science Saturdays at the Missouri State Fair in Sedalia. The highly successful initiative reached tens of thousands through its programs and on-site science experiments. Some of the largest employers in Missouri validated this initiative with their financial support because of the importance of a competitive workforce to their future success.



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"Thanks to the tremendous effort of the SCOPE staff and volunteers, science and technology was an important part of the 2010 State Fair celebration, providing a logical series of activities and presentations running through the workforce development pipeline from middle school to college, clear through to career organizations like NASA and Boeing. Overall the experience left me with many visions of the lives--both young and old--that were touched by Science Saturdays at the State Fair."

Ben Wiehe

Program Manager

Science Festival Alliance, MIT Museum

1. Governor Jay Nixon launches the MOBIO Discover Your Talent BioScience Education and Outreach Mobile Unit at the BIO International Convention in Chicago in 2010

2. Drew Smith, 8, of Sedalia, experimenting with science at the Show-Me Robotics event at the 2010 Missouri State Fair.

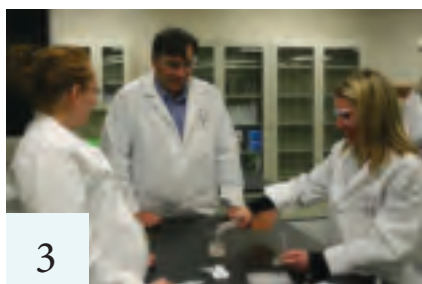
SYDNEY BRINK/THE SEDALIA DEMOCRAT

Animal Health Workforce Initiative

In 2008, MTC provided initial funding to establish the Workforce Development Training Laboratory at the Christopher S. (Kit) Bond Science and Technology Incubator. The goal of the initiative is to provide hands-on training in a real-world industrial laboratory for students at Missouri Western State University in St. Joseph. With this kind of training, students are better prepared to make the transition from school to industry and secure high-paying jobs in the Animal Health Corridor. An anchor company of the Corridor, Boehringer Ingelheim Vetmedica in St. Joseph, is completing a \$130 million expansion and needs access to a trained workforce to facilitate its growth.

Since becoming operational, the Workforce Development Training Laboratory has provided two master-level courses in certified good manufacturing practices (cGMP), two biomanufacturing courses, and several short courses through the Regional Professional Development Center (RPDC). The RPDC courses provide training to both students and teachers from area middle and high schools. Furthermore, a new start-up company – New Functional Polymers – is utilizing the laboratory to assist in its growth. The company chose to work in St. Joseph because of the available wet laboratory space.

From training science and math teachers, building a competitive workforce, and fueling the growth of Missouri companies, this strategic investment will continue to pay dividends for years to come.



1. Missouri Western State University students working with Dr. Gary Clapp in the laboratory

2. Missouri Western State University students conducting hands-on experiments in the Workforce Development Training Lab located at the Christopher S. (Kit) Bond Science and Technology Incubator

3. Dr. Gary Clapp provides instructions to students in the laboratory

Missouri Center for Advanced Power Systems Research

The Missouri Center for Advanced Power Systems Research (MOCAP) became a reality in 2010. MOCAP is an innovative university-industry partnership that aims to fill a gap between classroom education and real-world work experience for students pursuing a career in advanced battery development and manufacturing.

Home to EaglePicher Technologies, the Joplin community is at the cutting-edge of developing and manufacturing advanced batteries for the aerospace, defense, medical, and clean energy industries. EaglePicher batteries even power the international space station. A highly focused workforce initiative such as MOCAP is critical to train the workforce needed to fuel the growth of high-tech companies in Missouri like EaglePicher.

With funding provided by MTC, MOCAP established itself in bricks and mortar at the Mills H. Anderson Justice Center on the campus of Missouri Southern State University with a classroom and laboratory complex. MOCAP will initially provide students majoring in engineering, chemistry, materials science, and physics with a minor in energy storage and battery technology. The partnership will also provide continuing education to existing workers to insure they have the sharp skills necessary to stay ahead in this competitive industry. Furthermore, video and online courses will be available for students who attend other schools participating in the partnership.

The MOCAP minor in energy storage and battery technology created is believed to be the first of its kind in the United States.



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"The MOCAP is a great example of economic development and I hope it can serve as a model for more partnership's of the same kind in the future."

The Honorable Ron Richard
Speaker of the
Missouri House of Representatives



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MOCAP is undertaking efforts to work with private industry and others to conduct advanced battery research. This work will strengthen the Joplin community's efforts to be a hub of innovation at the forefront of cutting-edge battery technology.

The partners with MTC in this initiative are Missouri Southern State University, Missouri State University, Missouri University of Science and Technology, University of Missouri-Columbia, EaglePicher Technologies, Joseph Newman Innovation Center, and the Joplin Area Chamber of Commerce.



1. MOCAP ribbon-cutting and open house held on March 12, 2010 (Joplin)
2. Jason Hall, Executive Director, MTC
3. Hon. Ron Richard, Speaker of the Missouri House of Representatives
4. Equipment used in the MOCAP training laboratory

"The Missouri Center for Advanced Power Systems Research (MOCAP) has been three years in the making and is now beginning to pay dividends. The goal of the MOCAP project was to leverage energy storage technology research among the four member universities and industry, and to educate future and current engineers in this technology. The importance of establishing this organization is its potential for economic development and growing the knowledge base, research base, and consequently the business base in the State of Missouri for this exploding field of energy storage technology. Missouri Technology Corporation's funding for this project was not only critical, but ensured its success and will bring more business and jobs in this field to Missouri."

Darrell Ideker
Senior Program Manager
EaglePicher Technologies, LLC



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Industrial Expansion Workforce Competitiveness Partnerships

Growing Missouri's entrepreneurial and innovation economy is a task larger than any one organization. In recognition of the necessity of collaboration to reach the organization's larger goals, MTC collaborates with strategic partners across the state. Meaningful partnerships can produce game-changing results for Missouri and help MTC achieve its vision.

Missouri Biotechnology Association

The Missouri Biotechnology Association (MOBIO) is a strategic partner. Both MOBIO and MTC share a common vision of growing cutting-edge bioscience industries in Missouri and promoting economic development. MOBIO was selected to lead the high-tech marketing campaign funded by the General Assembly, and that campaign continued in 2010. To reinforce Missouri's leadership and to attract new business opportunities to grow Missouri's bioscience clusters, MOBIO leads a multi-year public-private partnership uniting industry, economic development organizations, and higher education to market Missouri's strength.

As part of this program, MOBIO has led Missouri's delegation to the BIO International Convention – the largest gathering of the bioscience industry in the world. These efforts are producing tangible results. For example, it was at the 2009 BIO International Convention that Missouri's leadership began a conversation with Pioneer Hi-Bred that ultimately led to its \$55 million expansion in New Madrid County in 2010.

MOBIO has led similar delegations to leading bioscience hubs in Japan and Israel. These efforts include private industry, particularly emerging Missouri-based companies that seek to do business beyond Missouri's borders to create jobs back home. These efforts open up opportunities that would not exist without MOBIO's industry knowledge and diligent work to make Missouri's bioscience footprint known around the world.

In 2010, MOBIO's creativity and efficient use of resources led to the launch of perhaps the most innovative trade show space in the entire International BIO Convention showroom. MOBIO unveiled a mobile fifth-wheel unit on the showroom floor to serve as Missouri's pavilion. It attracted visitors from around the world to learn about Missouri and served as a hub for Missouri businesses to connect with a global customer base. When the convention came to an end, the Missouri pavilion, unlike others on the showroom floor, did not get packed away in a box to be used a year later. The mobile pavilion now serves as the centerpiece of MOBIO's "Discover Your Talent" workforce development initiative that is travelling into rural and urban communities to inspire students to pursue careers in bioscience.

"Attending the BioJapan conference afforded Dynalabs many networking opportunities with potential customers in Australia, South Africa, and Japan, and others, so we knew we had a commercially-viable product. You cannot put a price tag on these types of connections. Jason Hall at MTC, and the team at the Department of Economic Development, were instrumental in making it happen. Securing customers around the globe is what is allowing our rapid expansion and the construction of our new world headquarters in the City of St. Louis."

Michael Pruett

Managing Partner, Dynalabs

Russell Odegard

Managing Partner, Dynalabs



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Missouri-Israeli Initiative

Israel produces more high-tech start-ups per capita than any other country in the world. It is a hotbed of innovation and has a strong pipeline of entrepreneurial talent. The start-ups are often seeking a business location in the United States to expand into the world's largest economy. Missouri is an ideal location for these start-ups. Attracting venture capital-backed, high-growth companies and entrepreneurial talent in the biosciences aligns with Missouri's strategic efforts to grow its economy and create high-paying jobs. More specifically, Israel has a strong track record of producing successful plant science and medical device companies, which align with two of Missouri's most prominent bioscience clusters.

The states of Colorado and Ohio are aggressively pursuing similar strategies. To keep Missouri competitive, business and civic leaders in Missouri are in the early stages of working together to capture this opportunity for growth in Missouri. In 2010, Missouri's leadership met with emerging Israel start-ups at the International BIO Convention and invited those companies to meet with potential collaborative partners in Missouri. The Jewish Community Relations Council leveraged the Missouri-Israel Initiative partners to connect potential strategic partners in Missouri with the leadership of Israeli emerging companies.

Ultimately, the Initiative would like to secure a permanent Missouri presence in Israel to bolster our ability to attract more entrepreneurial talent and start-up businesses to Missouri.

1. Jason Hall speaking at the BIO event
2. MOBIO 's Discover Your Talent BioScience Education and Outreach mobile unit
3. Dennis Pruett, Missouri Partnership; Jessica Winschel, MOBIO; and Kelly Gillespie, Executive Director of MOBIO at the Israel BIOMed Conference in Tel-Aviv
4. Missouri University of Science and Technology's 2010 solar car

I-44 Corridor Initiative

Branding Missouri strength produces tangible results. The now internationally recognized Animal Health Corridor is a great example of an industry, university, civic, and government partnership that highlights Missouri's strength. This effort reinforces Missouri's global leadership in growing industries and is a magnet for private capital investment, business expansion, and, most importantly, job creation. Similar outcomes have been achieved in Eastern Missouri in the plant science industry.

MTC has been encouraged by private industry to lead an industry, university, civic, and government partnership to show Missouri's strength in applied engineering and materials science along the I-44 Corridor. Communities along I-44 including St. Louis, Rolla, Fort Leonard Wood, Springfield, and Joplin have tremendous assets in designing and producing advanced materials, including carbon fibers, solar panels, ceramic armor, and advanced batteries, just to name a few. By combining these strengths under one strong Missouri brand, private industry is better positioned to market their products around the world and create jobs back at home. This project could also reinforce an identifiable innovation hub that will attract new businesses, similar to the Animal Health Corridor and the plant science hub in Eastern Missouri. MTC is in the early stages of assembling a stakeholder group to evaluate this exciting possibility for moving Missouri forward.



4

Ag Innovation Showcase

MTC served as a founding partner and sponsor of the annual Ag Innovation Showcase. The Showcase was held at the Donald Danforth Plant Science Center in St. Louis County in May 2010. This event brings early-stage companies from across the world to St. Louis to connect with Missouri researchers and venture capitalists from across the country. In only its second year, the Showcase is already becoming the premiere investment summit for agriculture-biotech entrepreneurs and investors. Total attendance at the event increased by 28% and investor attendance more than doubled, including some of the best known venture capitalists in the world, such as Kleiner Perkins, Hunt Bioventures, and MPM Capital, among others.

By being home to the premier agriculture-biotech investment forum, Missouri secures competitive advantages over other states. First, we get an opportunity to see the most innovative emerging companies from around the globe and connect those companies to our local researchers, universities, and other scientific assets. These relationships produce results. In just the second year of the event, MTC is in the final stages of negotiating the relocation of a rapidly growing entrepreneurial plant science company from India to the St. Louis region. Secondly, venture capital firms from around the country get a first-hand view of Missouri's entrepreneurial companies and research assets. These connection points help overcome some of the initial obstacles a Midwestern state faces in attracting venture capital. Taken together, these advantages reinforce that Missouri is the leading hub of plant science innovation in the world.



1

1. Atrium at Donald Danforth Plant Science Center during the Ag Innovation Showcase

2. Panel discussion at the Ag Innovation Showcase

3. Networking during the Showcase



2

3



"I have presented at hundreds of events and even done live television and this is without doubt the most well prepared, professional and thorough event at which I've ever spoken. I have already secured one investment within days of the event and have 4 others seriously engaged. I wouldn't have believed it had I not experienced it myself."

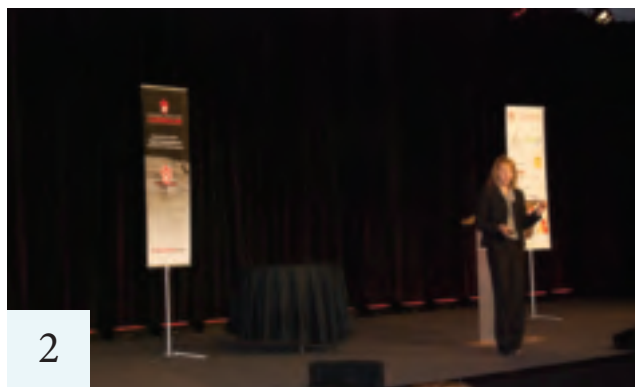
Bruce Moeller
CEO
AquaSpy, Inc



Animal Health Investment Forum

MTC co-sponsored and provided support for the Animal Health Investment Forum presented by the Kansas City Area Development Council (KCADC) in August 2010. This investment forum occurred during KCADC's highly successful Animal Health Homecoming annual event which brought together more than 800 leaders in the animal health industry to Kansas City. In its second year, the Investment Forum had 200 attendees and the number of venture capital funds represented more than doubled.

Again, by being home to the premier animal health investment forum, Missouri secures unique advantages over other states. Emerging companies around the world have a unique opportunity to learn first-hand about Missouri's unique strength in the animal health industry and we bring venture capital firms from around the world to Missouri. In only the second year of the forum, MTC is evaluating potential transactions to bring some of these entrepreneurial animal health companies to Missouri on a permanent basis. These advantages reinforce that Missouri is *the place* to do business in the animal health industry.



"The Animal Health Investment Forum is one of those rare examples of really well-done branding intersecting with market need. Not only does the Corridor have the largest concentration of animal health companies, it understands the funding challenges of early-stage companies that can make significant long-term contributions to the industry. Advanced Animal Diagnostics was pleased to have the opportunity to present at the Forum; nowhere else in the world could we reach so many investors in one location who are truly interested in animal ag investments. We've seen a great deal of investor interest from established players as well as those new to the ag space. But even with a proven management team and blockbuster technology customers want to buy, fundraising in this economy is not easy. The Forum fills an important need in the market for facilitating connections between investors and promising early-stage companies that can deliver exciting returns."

Joy Parr Drach
President

Advanced Animal Diagnostics



1. Networking during the Forum

2. Joy Parr Drach, President of Advanced Animal Diagnostics, presents during the Forum

3. Jason Hall with Tom Thornton, President & CEO of Kansas BioScience Authority, attending the Animal Health Investment Forum



ADVANCED
PRODUCTS

TECHNICAL
SERVICES

PROCESS
IMPROVEMENT



INNOVATIVE MANUFACTURING



Technology transforms manufacturing from the products we produce to how we produce products. MTC's investments insure that Missouri grows new businesses to manufacture the products of the future – like medical devices and agriculture-derived products – while also assisting small manufacturers throughout Missouri to cost-effectively produce traditional products that can be exported around the world under the proud label of “Made in Missouri.”



Advanced Products Technical Services Process Improvement

Advanced Products and Technical Services

Innovative high-tech companies do more than conduct research in laboratories. The end result of their research and development effort is the production of goods and services. A company that commercializes a medical device or that analyzes a chemical compound for the pharmaceutical industry is involved in production – manufacturing a cutting-edge product or producing new knowledge as technical services. Innovative manufacturing creates high-paying jobs for Missourians. In 2010, MTC’s work on projects such as the Missouri Plant Science Center and retaining Leinco Technologies is directly responsible for bringing more of these innovative manufacturing jobs to Missouri.

“The goal of the Missouri Plant Science Center is to combine groundbreaking plant science research with pilot-scale manufacturing capabilities. This pioneering center will rival any facility of its kind in the world and will produce cutting-edge products.”

Ryan Schmidt
President
Soy Labs, LLC

1. Pilot-scale manufacturing equipment being installed in the production area of the Missouri Plant Science Center

2. Employee monitors one of the bioreactors used to manufacture advanced proteins for use in diagnostic products at Leinco Technologies

3. Employee at Leinco Technologies removes biomaterial from cold storage to use in a manufacturing run



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Process Improvement

Manufacturing is still a critical sector in Missouri's economy. Another important charge given to the MTC is transferring advances in technology to Missouri manufacturers across the state. By providing Missouri manufacturers with the latest technological advances, they can reduce cost, increase productivity, and ultimately remain competitive with foreign nations. MTC achieves this objective through the work of the Missouri Manufacturing Extension Partnership (MEP). MEP is administered by Missouri Enterprise in Rolla.

"When I see everyone in our shop paying attention to the quality of their products, I know that we have implemented a quality system that works from start to finish. We all have an increased sense of pride about what we produce every day."

Keri D. Welhart, President
Stroco Manufacturing Company
Hazelwood, Missouri

1



2



"Missouri Enterprise is an important partner and its services have enabled our company to increase sales and reduce costs by hundreds of thousands of dollars, much of which has been reinvested in the business to support our growth and expansion."

Nick Sanazaro
President
Meramec Electrical Products Company
Cuba, Missouri

1. Meramec Electrical holds the distinction of being the largest bushing transformer manufacturer in the Western Hemisphere (Cuba, Missouri)
2. Stroco Manufacturing manufactures products for the aerospace industry and high-precision industries (Hazelwood, Missouri)

Looking Ahead

Big Year for Bioscience in Missouri

MOSIRA is the key to future success for the state.

The bioscience industry is living up to its promise of creating sustainable, high-paying jobs in communities across Missouri. Drawing on our rich agricultural history, Missouri's growing bioscience

sector promises still be needed in order for us to realize our vision of leveraging Missouri's rich agricultural history to help create new, high-paying jobs, attract capital investment

and provide tools to help entrepreneurs grow new Missouri-based companies.

Last year, Governor Jay Nixon announced a bold initiative that could transform Missouri's bioscience industry: the Missouri Science and Innovation Retention

Act or, simply, MOSIRA. This legislation would create a performance-based funding mechanism (similar to the one established in Kansas for the Kansas Bioscience Authority) that would provide the Missouri Technology

Continued on page 47

The Missouri Technology Corporation has had an outstanding year in 2010, but much work remains to be done for Missouri to reach its full potential. Our great State continues to rank among the best in the country at conducting cutting-edge research at our public and private research universities and other research institutions. Transforming this research into an engine of economic development through entrepreneurship and innovation holds great potential for creating high-paying jobs throughout the State, but it will take a long-term commitment. This annual report highlights the early stages of what Missouri looks like when we support the entrepreneurial spirit of Missouri and invest in an innovation economy. We can look at the results of other successfully executed entrepreneurial and innovation economic development strategies around the country from Silicon Valley in California to Research Triangle Park in North

Carolina. Increasingly, these strategies are not unique to the East and West coasts in the United States. Midwestern states are successfully executing these strategies as well. During the past few years, Kansas made a \$580 million commitment to growing its bioscience industries and Ohio's Third Frontier program is investing over \$1 billion to revive its entrepreneurial past. With similar support in Missouri our entrepreneurial spirit, strong research base, and tremendous work ethic position us to be the undisputed leader known around the world for our innovations and thriving 21st Century economy.

Bioscience fund is no-brainer

It's a political no-brainer for Missouri to establish the equivalent of the Kansas Bioscience Authority. The state's impressive life sciences and higher education assets virtually ensure the program's success.

Last year, former Kansas state Rep. Kenny Wilk, one of the authors of the legislation that created the KBA, explained to a Missouri General Assembly committee why many Kansans supported similar legislation in the



1. Kansas City Small Business (September 2010)
2. Kansas City Business Journal (September 10, 2010)



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The MTC Board and staff would like to thank the following individuals and organizations for their assistance in providing content, other support for this annual report, and for their support and dedication to the State of Missouri.

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Center for Emerging Technologies
Columbia Daily Tribune
Confluence Life Sciences
Donald Danforth Plant Science Center
Dynalabs
EaglePicher Technologies, LLC
Inveno Health
InnovaPrep, Inc.
Innovate St. Louis
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Harry S Truman Building, Room 680

P.O. Box 2137

Jefferson City, MO 65102

Telephone: (573) 526-0470 • Fax: (573) 526-8202

www.missouritechnology.com